

# TABLE OF CONTENTS

Executive Summary	4
Overview	5
Florida's Focus Zero	5
Federal Performance Requirements	7
Hazardous Roadway Features and Key Road Users	9
Project Identification	10
HSIP Project Identification Methodology	10
Analysis and Prioritization Tools	10
Highway Safety Improvement Program (HSIP) Overview	13
Florida's HSIP Update Process	13
HSIP Funding Eligibility and Use of Funding	14
Project performance and Progress Tracking	16
Federal Performance Tracking and Reporting	16
Evaluating Effectiveness of Safety Investments	17
Implementing the Highway Safety Improvement Program	18
Statewide Systemic Initiatives	18
Moving Towards Zero	24
Target Zero Campaign	24
Improving Partner Coordination and Aligning Safety Activities	25
Collaboration with Florida's MPOs to Prioritize Safety Targets	25
Local Road Safety Plans	25
Central Florida Strategic Safety Plan	26
Florida Rail Safety Coalition	26
Safe Streets and Roads for All	26
Target Zero Partners	27
Conclusion	28

The HSIP Implementation Plan was developed to demonstrate Florida's progress toward meeting its annual safety performance targets as required by the Federal Highway Administration (FHWA) under 23 U.S.C. 148(i). The HSIP Implementation Plan will help the state continue to focus limited resources on reducing the number of fatalities and serious injuries on the transportation system with the understanding that no death is acceptable on Florida's transportation system.

# **EXECUTIVE SUMMARY**

Florida adopted a vision of zero fatalities and serious injuries on its transportation system and identified this vision as the highest priority. The Florida Department of Transportation (FDOT) set zero as the target for all safety performance measures required by the Federal Highway Administration (FHWA), including fatalities, fatality rate, serious injuries, serious injury rate, and non-motorized fatalities and serious injuries.

Florida's traffic safety fatalities, like much of the nation, are expected to remain high, and it is clear more must be done to reverse this alarming trend. In response to these trends, this document identifies the activities FDOT will undertake with its partners in federal fiscal year (FFY) 2026 to make progress toward achieving its target of zero fatalities and serious injuries. This plan goes beyond specific FHWA requirements following the assessment that Florida has not met or made significant progress toward achieving its safety performance targets. This plan also provides an opportunity for FDOT and its partners – Metropolitan Planning Organizations (MPOs), local governments, and educational, law enforcement, emergency management, and other safety professionals – to recommit to the vision and target of zero, as well as additional actions each organization can take to help make this target a reality.

Consistent with FHWA requirements, this plan focuses specifically on implementation of the Highway Safety Improvement Program (HSIP) as a core federal-aid highway program focused on the mission of reducing fatalities and serious injuries. The plan documents the continued enhancements planned for Florida's HSIP to better leverage the benefits of this program. However, recognizing that FDOT already allocates all HSIP funding to safety programs - and building on the integrated approach that underscores FDOT's safety strategy - this plan also documents how additional FDOT and partner activities may contribute to progress toward zero.

Key FFY 2026 commitments identified in The HSIP Implementation Plan include the following:

- Hazardous Roadway Features and Key Roadway Users
- Project Identification
- HSIP Program Overview
- Project Performance and Progress Tracking
- Moving Towards Zero



# **OVERVIEW**

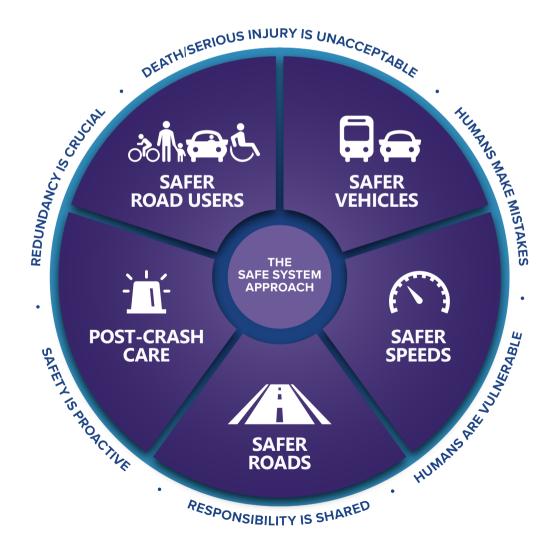
## Florida's Focus on Zero

FDOT and its traffic safety partners are committed to eliminating fatalities and serious injuries with the understanding that the death of any person is unacceptable. Safety remains a top priority.



The state's safety vision and performance target is

zero deaths and serious injuries. The updates of the <u>Florida Transportation Plan</u> and <u>Strategic Highway Safety Plan</u> (SHSP) are underway, Florida will continue its commitment to the target of zero traffic fatalities and serious injuries. This target is consistent throughout the FTP, SHSP, <u>Highway Safety Improvement Program</u> (HSIP), and <u>Highway Safety Plan</u> (HSP). Florida's Target ZERO vision is documented for each of the statewide transportation performance measures in the Florida HSIP Annual Report. Florida's SHSP aligns with the Federal Highway Administration's Safe System approach.





FDOT's vision is to "provide a transportation network that is well planned, supports economic growth, and has the goal of being congestion and fatality free." Figure 1 highlights the alignment between key safety-related plans and Target Zero.

To achieve its target of a fatality-free transportation system, FDOT coordinates with MPOs and local governments to align safety priorities at the regional and local levels. Transportation projects are identified and prioritized with Florida's 27 MPOs as well as local governments in non-metropolitan areas. Data are analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. MPOs and local governments consider safety data analyses when determining project priorities.

The Florida Transportation Plan, or FTP, is the state's long range transportation plan. The FTP is a plan for all of Florida and acts as a comprehensive blueprint guiding Florida's transportation future. It is a collaborative effort of state, regional, and local transportation partners and the public and private sectors. The FTP affirms Florida's vision and target of zero fatalities and serious injuries. Florida's transportation decisions are also guided by the <a href="Strategic Intermodal System (SIS) Policy Plan">Strategic Intermodal System (SIS) Policy Plan</a>, the <a href="Statewide Transportation Improvement Program">Statewide Transportation Improvement Program</a> (STIP), SHSP, HSIP, and HSP. Other activities that help the state achieve the safety target include the Program Planning Workshops and FDOT's Development, Design, and Construction Standards.

### **NATIONAL SAFETY GOAL**

To Achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

## FLORIDA'S SAFETY VISION

The safety visions of the Florida Department of Transportation, Florida Transportation Plan, and Strategic Highway Safety Plan, along with Florida's traffic safety performance targets all lead to a transportation system with zero fatalities and serious injuries.





# **Federal Performance Requirements**

Federal rule (23 CFR 490.209(a)) requires state DOTs to establish targets and report performance on five safety performance measures, including:

- Number of fatalities;
- Rate of fatalities per 100 million vehicle-miles traveled (VMT);
- Number of serious injuries;
- Rate of serious injuries per 100 million VMT; and
- Number of non-motorized fatalities and number of non-motorized serious injuries.

In the 2017 HSIP Annual Report, FDOT established statewide 2018 safety targets, which set the target at "0" for each safety performance measure to reflect the vision of zero deaths. These targets were reaffirmed for each subsequent calendar year through 2025.

As part of this process, FDOT worked with Florida's 27 MPOs to establish both the state and MPO safety targets. A total of 21 MPOs adopted the state's safety targets of zero. The remaining six MPOs established MPO-specific targets for their planning area committing to gradual progress toward zero, while still supporting the state's vision of zero traffic fatalities and serious injuries.

The Code of Federal Regulations (CFR), 23 CFR 490.211(c)(2) specifies that a state department of transportation (DOT) has met or made significant progress toward meeting its safety performance targets when at least four of the five safety performance targets are met or the actual outcome is better than the baseline performance for the year prior to the establishment of the target.

On May 19, 2025, FHWA reported the results of its calendar year 2023 safety performance target assessment. FHWA concluded that Florida did not meet or make significant progress toward its safety targets, noting that zero was not achieved for any measure. Despite this, it is worth noting that the number of serious injuries, the serious injury rate, and the number of non-motorized fatalities and serious injuries have improved compared to the baseline. Table 1 summarizes the findings of the most recent assessment.



PERFORMANCE MEASURE	2019-2023 TARGET	2019-2023 ACTUAL	2017-2021 BASELINE	MET TARGET?	BETTER THAN BASELINE?	MET OR MADE SIGNIFICANT PROGRESS?
Number of Fatalities	0	3,439.8	3,301.2	No	No	
Rate of Fatalities per 100 million vehicle miles traveled (VMT)	0	1.542	1.512	No	No	
Number of Serious Injuries	0	16,499.8	18,015.8	No	Yes	No
Rate of Serious Injuries per 100 million vehicle miles traveled (VMT)	0	7.382	8.232	No	Yes	0
Number of Non-Motorized Fatalities and Serious Injuries	0	3,161.4	3,164.4	No	Yes	

Table 1: Federal Performance Targets (2019-2023)

Based on this assessment and consistent with 23 U.S.C. 148(i), FHWA requires that FDOT develop and submit an HSIP Implementation Plan for FFY 2026. Based on FHWA's HSIP Implementation Plan Guidance, this plan must:

- Identify roadway features that constitute a hazard to road users;
- Identify highway safety improvement projects on the basis of crash experience, crash potential, or other data-supported means;
- Describe how HSIP funds will be allocated, including projects, activities, and strategies to be implemented;
- Describe how the proposed projects, activities, and strategies funded under the HSIP will allow Florida to make progress toward achieving the safety performance targets; and
- Describe the actions Florida will undertake to achieve the performance targets.



# HAZARDOUS ROADWAY FEATURES AND KEY ROAD USERS

Florida's total number of traffic fatalities increased every year from 2019 to 2021, where fatalities were at an all-time high before decreasing slightly in 2022 and again in 2023. Florida's rate of fatalities per 100 million vehicle miles traveled (VMT) has experienced a similar pattern, with the peak rate of 1.72 in 2021 and declining to 1.54 in 2023. This trend reflects the national trend of traffic fatalities and illustrates the need for new and innovative approaches to safety in Florida and across the United States.

In contrast to the trend in traffic fatalities, Florida's serious injury trends are improving at a steadier pace. Between 2019 and 2023, the number of serious injuries in Florida declined by nearly 19 percent while the serious injury rate (per 100 million VMT) declined by 21 percent. Florida will continue to build on the successes of reducing serious injuries while focusing on countermeasures to mitigate and eliminate fatalities and serious injuries.

Florida's trend in non-motorized fatalities and serious injuries has remained flat compared to baseline, again demanding new and innovative approaches to safety in Florida.

Programs administered under the HSIP to address these issues consist of the following:

- Bicycle Safety
- Intersection
- Pedestrian Safety
- Skid Hazard
- Other-Lane Departure



# PROJECT IDENTIFICATION

# **HSIP Project Identification Methodology**

Each program administered under the HSIP consists of processes to justify the priorities and approaches to the HSIP programs. Within each program, certain data types i.e. (crash, exposure, roadway) are used to analyze safety challenges. Using those data, types of projects are identified using the following methods:

- Crash frequency
- Crash rate
- Excess expected crash frequency
- Over-representation of crashes
- Crash tree diagrams
- Applications of safety performance functions (SPFs)

After projects are identified, either by the Districts or Central Office, projects are prioritized based on benefit-cost ratio, net benefit, net present value, available funding, and cost effectiveness. The following tools and analyses are available to help FDOT Central Office and Districts identify and prioritize potential HSIP Projects and programs.

## **Analysis and Prioritization Tools**

Florida employs a variety of tools and analyses to identify existing and potential locations where traffic crashes are or could become a problem. Predictive analysis tools can be used to evaluate roadway characteristics and crash trends to identify locations that do not have a high rate of crashes but exhibit the confluence of conditions that could contribute to crashes, allowing FDOT to strategically invest in countermeasures, preventing crashes before they happen. Additionally, FDOT conducts statewide analysis on historic crash patterns to identify locations where the crash rate is highest and gathers requests for safety improvements from the public and safety partners. Safety analyses are conducted in those specific locations and improvements are prioritized and implemented through the HSIP process.

## State Traffic Roadway and Intersection Data Evaluation System (STRIDES) 2 Zero

The State Traffic Roadway and Intersection Data Evaluation System (STRIDES) 2 Zero program was established to leverage FDOT data, roadway characteristics, and crash data to screen roadway sites for improving safety and mobility. This program uses predictive analytics for business decisions on roadway and operational improvement projects while tracking and documenting the return on investment. As part of the STRIDES 2 Zero initiative, a network screening process has been conducted annually by developing Florida-specific Safety Performance Functions (SPFs) with recent traffic and crash data and applying the Empirical Bayes (EB)-based predictive method to determine the long-term expected safety performance of signalized intersections on the State Highway System (SHS).



This network screening process identifies 175 candidate intersections – those intersections with an estimated excess in expected crash frequency – and sister intersections – intersections that have similar characteristics, like number of legs, roadway context, and traffic volume – that experienced fewer fatal or serious injury crashes. Sister intersections are evaluated to determine if any safety features or countermeasures are present that could be implemented at candidate intersections to improve safety performance.

Click here for more information about STRIDES 2 Zero.

#### **Vulnerable Road User Safety Assessment**

FDOT is currently updating the state's Vulnerable Road User (VRU) Safety Assessment as a part of the update of the state's Strategic Highway Safety Plan (SHSP). Florida is building on the previous VRU Safety Assessment, retaining three priority tiers of 1-mile segments with an overrepresentation of non-motorized fatal and serious injury crashes. The VRU Safety Assessment will include an updated dynamic dashboard allowing FDOT and traffic safety partners to easily identify top priorities and commonalities among priority locations. FDOT will continue to evaluate priority VRU locations to identify systemic countermeasures and solutions that will eliminate non-motorized fatal and serious injury crashes. The Statewide VRU Dashboard can be found on Florida's <u>Safety Data Integration Space</u>.

#### **SAFETY Systems**

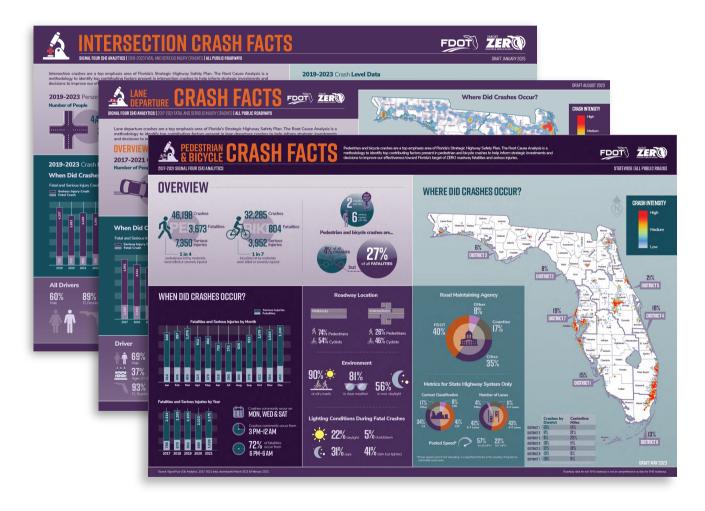
Safety Analysis and Financial Evaluation Technology Systems, or SAFETY Systems, is a process that includes network screening for historic- and risk-based approaches to analyses, to countermeasure selection, economic analysis and prioritization, programming projects, tracking their implementation, and evaluating their effectiveness. The SAFETY Systems initiative will bring together data such as crash data, traffic volumes, roadway characteristics, and Work Program together in one location, and will help drive analysis tools and dashboards used in each step of this process.



#### **Root Cause Analysis**

FDOT is further refining and innovating to focus on the most significant factors accounting for the most fatal or serious injuries. FDOT applies <u>root cause analysis</u> with the Pareto principle for outcomes, whereby nearly 80 percent of consequences come from 20 percent of causes. This practice helps to concentrate resources, countermeasures, and improvement initiatives on factors with the most significant impact on traffic safety.

FDOT applies this methodology to several of Florida's most pressing traffic safety challenges, including pedestrian and bicycle safety, lane departures, and intersections. Each of these root cause analyses seek top contributing factors present in these crashes to help inform strategic investments and decisions to improve effectiveness toward Florida's target of zero roadway fatalities and serious injuries. These analyses identify when and where crashes occur and determine who was involved and what roadway characteristics were present at the time of crash. A variety of common crash scenarios are developed and potential solutions to address each scenario are prioritized and considered for implementation throughout the state.





# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) OVERVIEW

The HSIP is a state-administered federal-aid highway program with the purpose of achieving a significant reduction in traffic fatalities and serious injuries on all public roads. Funding is apportioned to Florida per Fixing America's Surface Transportation (FAST) Act formulas as explained on the <a href="FHWA website">FHWA website</a>. In recent years, Florida received over \$150 million annually for the HSIP. Florida continues to allocate all available HSIP funding to safety projects.

# Florida's HSIP Update Process

FDOT's State Safety Office works closely with FDOT Districts and regional and local traffic safety partners to update the HSIP annually. Historic, risk-based, and predictive safety analyses are conducted to identify appropriate proven countermeasures to reduce fatalities and serious injuries associated with Florida's SHSP emphasis areas, resulting in a list of projects that reflect the greatest needs and are anticipated to achieve the highest benefit. While these projects and the associated policies and standards may take years to implement, they are built on proven countermeasures for improving safety and addressing serious crash risks or safety problems identified through a data-driven process.

Florida's HSIP focuses on highway safety improvement projects that are aligned with the Strategic Highway Safety Plan and consider budget parameters:

- Low cost (typically under \$1,000,000);
- Shorter-term, with concept to construction in under three years;
- Implemented on a public road; and
- Address a problem known to result in fatalities and serious injuries.

While the items listed above are typical aims of HSIP projects, safety needs, such as intersection redesigns and improvements, can exceed HSIP project funds. Districts may choose to use only a portion of HSIP funds to address safety needs in this instance. The primary intent of the HSIP is to implement engineering safety improvements. However, the Safe System approach can be considered in developing HSIP projects. Safety studies can determine whether engineering is an effective way to improve safety at each location. Comprehensive strategies pairing engineering projects in the HSIP with supplementary efforts from other disciplines is a proven way to increase the effectiveness of safety improvements.

FDOT Central Office works closely with each FDOT District to compile a list of projects representing the greatest safety needs anticipated to achieve the highest benefit. Proposed HSIP projects are authorized and funded based on assessments of District-level and statewide needs. Strong coordination with MPOs, local governments, and community traffic safety teams by the Districts is encouraged to identify needs and potential projects.



# **HSIP Funding Eligibility and Use of Funding**

23 U.S.C. 148(a) provides a sample listing of eligible highway safety improvement project types. Any project meeting all the following requirements is potentially eligible for funding in the HSIP:

- Implements safety infrastructure countermeasures or improves safety data collection, integration, and analysis such that HSIP stakeholders can better plan, implement, and evaluate highway safety improvement projects in the future;
- Consistent with an emphasis area, strategy, or activity identified in the Florida SHSP;
- Estimated benefit-cost ratio (BCR) of 1.0 or greater;
- Addresses a serious crash risk or safety problem identified through a data-driven process; and
- Likely to result in a reduction of fatalities and serious injuries.

FDOT's HSIP Guidelines provide detailed information on this data-driven process and funding eligibility.

Florida managed approximately \$167 million in HSIP funds for use during the state fiscal year from July 1, 2024 through June 30, 2025, and fully allocated those funds to safety projects. FDOT used these HSIP funds to complete projects, which address intersections, lane departure, pedestrian and bicyclist safety, and other programs representing the remaining SHSP emphasis areas.

- The emphasis areas (Lane Departures, Intersection, and Pedestrians and Bicyclists) account for 90 percent of fatal crashes and 75 percent of injury crashes and also account for 47 percent of HSIP funding.
- Florida projects invest more than 9 percent of HSIP funds toward programs, strategies, and activities directly related to the state's pedestrians and bicyclists, while many of the activities listed in remaining categories include countermeasures that benefit the state's most vulnerable road users.
- The remaining 51 percent of Florida's HSIP is invested in projects that include countermeasures that support a variety of SHSP Emphasis areas. For example, a project in FDOT District 3 includes countermeasures intended to eliminate lane departure crashes, intersection crashes, pedestrian and bicycle crashes, and wrong way driving crashes while improving access management and information and data support.

Table 2 summarizes the estimated number of projects and funding goals by program, strategy, or activity.

**Table 2: HSIP Summary Table** 

Program, Strategy, or Activity	Estimated Funding	Percent of Total (approximate)
Intersections	\$37 million	22%
Lane Departure	Almost \$28 Million	16%
Multiple	Over \$86 Million	51%
Pedestrian and Bicyclist	\$15 Million	9%
Grand Total	\$167 Million	



Florida's HSIP allocated \$140 million in infrastructure investments on state-maintained roadways and \$27 million in infrastructure investments on local roadways. Table 2 illustrates the breakdown of HSIP funding.

The latest list of HSIP projects can be found in the HSIP Annual Report



# PROJECT PERFORMANCE AND PROGRESS TRACKING

# **Federal Performance Tracking and Reporting**

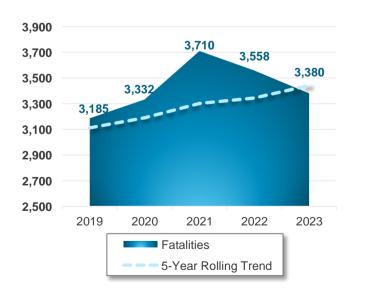
Under 23 CFR Part 490, each state is required to establish annual safety performance targets for five measures:

- Number of fatalities;
- Number of serious injuries;
- Fatality rate (per 100 million VMT);
- Serious injury rate (per 100 million VMT); and
- Number of non-motorized fatalities and serious injuries.

FHWA requires states to analyze safety performance targets using five-year rolling averages to support the forecasting of long-term trends. This methodology calculates the average number of fatalities occurring over a five-year period, considering data from 2019-2023 to report the performance metric for 2023, for example.

While Florida has not met the target of zero for each of the federally identified performance targets, the state remains committed to these targets and will continue to prioritize projects that advance the vision of zero traffic fatalities and serious injuries. Fortunately, Florida's annual trend in fatalities, fatality rate, serious injury, and serious injury rate have declined every year since 2021. Florida intends to build on this positive trend in an effort to get to the ultimate goal of zero fatalities and serious injuries.

The following figures show Florida data for each of these five measures between 2019 and 2023.



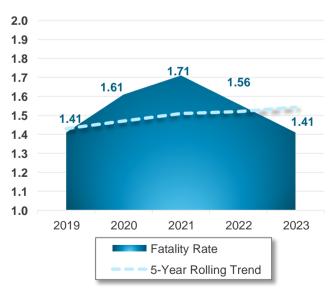


Figure 2: Florida's Total Annual Fatalities (2019-2023)



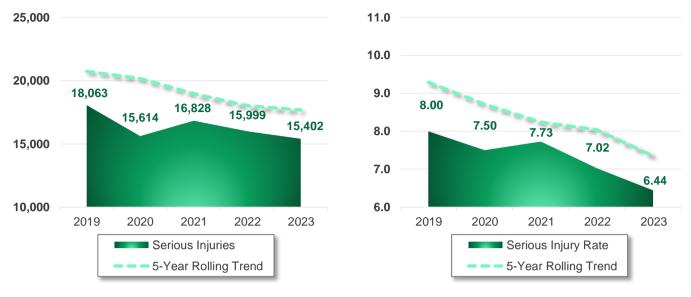


Figure 3: Florida's Total Annual Serious Injuries (2019-2023)

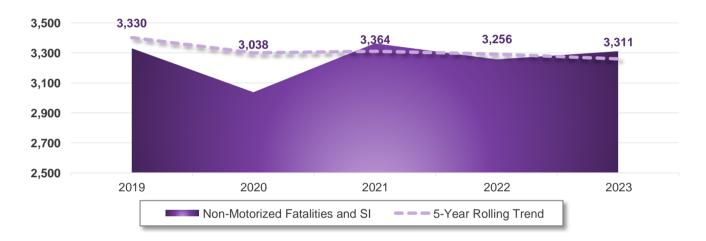


Figure 4: Florida's Non-motorized Fatalities and Serious Injuries (2019-2023)

# **Evaluating Effectiveness of Safety Investments**

Florida uses the HSIP Project Dashboard to evaluate the effectiveness of 2016-2020 construction projects funded by the HSIP. Florida experienced a 20 percent reduction in fatal and serious injury crash rates for a total of 274 fewer fatal and serious injury crashes specifically on those corridors. As statewide systematic projects are programmed, work program codes are used to track those investments so the effectiveness of that specific countermeasure can be monitored.



## Implementing the Highway Safety Improvement Program

FDOT enhanced coordination both internally (between FDOT Central Office and FDOT Districts) and externally (specifically, with MPOs and local governments) to help identify and advance HSIP projects that are anticipated to deliver a significant reduction in fatalities and serious injuries. FDOT provides technical assistance to local jurisdictions for the development of local road safety plans (LRSP) and uses those priorities to identify actionable projects eligible for HSIP funding.

## Statewide Systemic Initiatives

In addition to identifying safety needs and prioritizing projects at the local level, Districts also provide input on statewide initiatives. Statewide initiatives are evaluated based on analysis that estimates the following criteria:

- Crash reduction
- Benefit Cost Ratio
- Cost per Life Saved
- Total Cost

- Centerline Miles
- Lives saved
- Serious Injuries Reduced

Table 3 summarizes the analysis of statewide systemic initiatives.

Table 3: Countermeasures Ranked by Calculated Benefit/Cost Ratio

Program, Strategy, or Activity	SHS/ Limited Access	Countermeasure	Crash Reduction	B/C Ratio	Cost Per Life Saved (\$)	Total Cost (Million \$)	Centerline Miles	Lives Saved	Serious Injuries Reduced
Nighttime Intersection Crashes	SHS Intersections	Intersection Lighting	48%	42:1	-	\$100.0 M	2,546 Intersections	-	-
Fixed Object/ Run-Off Road	SHS, Rural, 2-Lane, 50MPH+	Rumble Strips Initiative	20%	32:1	\$0.41 M	\$60.00 M	3,085	150	-
Fixed Object/ Run-Off Road	LA, 6-8 Lanes, 50MPH+, Clear Medians	Statewide Median Barrier Initiative	39-69%	13:1	\$0. 85 M	\$130 M	121	152	688
Head-On	Limited Access Facilities	Wrong Way Driving	100%	3:1	\$3.77 M	\$45.0 M	520	31	-
Pedestrian	SHS Urban Bridges	Moveable Bridge	-	-	-	\$14.0 M	7 Bridges	-	-



In the fiscal year from July 1, 2024 through June 30, 2025, FDOT addressed systemic safety improvements with about \$12 million in HSIP funds. Incorporating safety countermeasures in various updates to engineering criteria give the ability to improve safety with every project in the FDOT Work Program. Criteria updates made in 2014 are now being reflected in recently completed construction projects.

#### **Intersection Pedestrian Lighting Retrofits**

Over 80 percent of Florida's pedestrian fatalities occur in dark conditions. The \$100M multi-year statewide pedestrian safety intersection lighting retrofit initiative addresses pedestrian safety at 2,500 intersections statewide and is almost complete. Fatal and serious injury crashes of all types were significantly reduced in these locations, and FDOT continues to monitor the reductions over the useful life of this countermeasure.

#### **Rumble Strips**

A significant proportion of fatal and serious lane departure crashes occur on Florida's rural 2-lane roadways with posted speeds of 55 mph and higher. Nearly 70 percent of these lane departure crashes occur on roadways with a paved shoulder and over half result in a collision with a fixed object off the road, like a tree or utility pole. To address this, the statewide rumble strip initiative was funded over 2 years with \$60M to address lane departure safety on over 3,000 centerline miles of roadways with a history of lane departures and began construction in FY 24. This initiative is projected to prevent over 150 fatalities over the useful life of this countermeasure.

#### **Median Barriers**

A significant proportion of fatal and serious lane departure crashes occur on Florida's rural high-speed limited access roadways. To address this, the statewide median barrier initiative was funded over 2 years with \$130M (comprised of \$70M HSIP and \$60M state funds) to address lane departure safety on over 100 centerline miles of roadways and will begin construction in FY 26. This initiative is projected to prevent over 250 fatalities over the useful life of this countermeasure.

#### **Wrong Way Driving**

A form of rapidly increasing lane departure crash is wrong way driving on Florida's interstates. The statewide wrong way driving initiative was funded over 3 years with \$32M to prevent occurrences and warn motorists with signing, pavement markings, and advanced detection and warning systems at interstate interchanges, and this work began in FY 23.

#### **Movable Bridges**

Florida has many intracoastal waterway bridges that frequently open and have high volumes of pedestrian traffic. Technology solutions improve pedestrian safety by detecting their presence and preventing bridge movement that could cause them harm. The statewide moveable bridge initiative was funded over 2 years with \$14M to install advanced detection systems to address bicyclist and pedestrian safety and began in FY 23.



#### **Horizontal Curves**

An additional countermeasure approved as the next statewide systemic initiative to include chevron, in lane pavement, and advance curve warning signs on over 2,700 rural and urban curves statewide. It focuses on those with a radius less than 2,000 feet, prioritizing rural roads (2-3 lanes) with speeds over 55 mph and urban roads (4-5 lanes) with speeds over 45 mph. This countermeasure is intended to reduce fixed object/run-off road crashes and is anticipated to result in 56-61 percent crash reduction, saving over 100 lives, and reducing serious injuries by over 500. This countermeasure was identified and ranked based on the same statewide systemic criteria discussed previously.

#### **Pedestrian and Bicyclist Safety Improvements**

The countermeasures and projects in this section describe completed and ongoing efforts to address critical pedestrian and bicyclists safety challenges throughout the state.

#### Pedestrian Channelization Barrier

Pedestrian Channelization Barriers are primarily used in medians to guide pedestrians to marked crosswalks. The FDM recommends pedestrian channelization barriers when other treatments such as midblock crossings are not feasible. These can be installed in contexts where there is a history of high midblock crossings of pedestrians on roadways where traffic stopping is unlikely and crashes are high.

#### Leading Pedestrian Intervals

Leading Pedestrian Intervals (LPIs) are used to aid pedestrians crossing intersections by delaying the green interval from timing at the beginning of the walk interval. This advanced walk time provides a buffer to allow pedestrians a "head start" to traverse across an intersection prior to vehicles entering the green interval. LPIs are being introduced at intersection locations with high occurrences of fatal and serious injury crashes involving pedestrians. LPIs allow pedestrians to better establish their presence within the crosswalk and provide increased visibility and reduced conflicts between pedestrians and turning vehicles.

#### Separated Bike Lanes

In 2022 and 2023, FDOT began developing revised criteria for separated bike lanes, based on anticipated guidance in the AASHTO Bicycle Facilities Guide update. The updated criteria is now included in the 2025 FDOT Design Manual (FDM) and provides design and planning support for protected intersections (conventional and roundabout) as well as a variety of other roadway conflict points. Separated bike lanes are becoming recognized as a highly effective safety countermeasure for bicycle crashes, and FDOT has engaged national-level experts to develop context classification-appropriate separated bicycle lane criteria.

Local project examples include:

- SR-806/Atlantic Avenue
- SR-806/Lake Worth Road
- SR-704/Okeechobee Boulevard



#### Orange Blossom Trail Pedestrian Safety Improvements

The Florida Department of Transportation's \$9 million Orange Blossom Trail Pedestrian Safety Improvements project was completed in October 2023 and aimed to address a 1.2-mile stretch of US 441 with 70 pedestrian and bicyclist crashes resulting in 57 injuries and 13 fatalities from 2014-2019. The project focuses on encouraging vehicles to comply with the 35 mph speed limit by implementing raised crosswalks that naturally slow traffic. Those raised crosswalks, along with new pedestrian signals, led to drivers stopping more consistently for people crossing the road. The corridor now features six midblock and two signalized crossings, providing frequent crossing opportunities approximately every 600 feet along that 1.2-mile stretch of road. Those crossings are well-utilized and strategically designed with fencing in the median to guide pedestrians toward safer crossing points. FDOT collaborated closely with LYNX, the local transit provider, to position bus stops near the midblock crossings for the convenience and safety of transit users. Feedback from pedestrians indicates they feel safer navigating the area as a result of these improvements.

#### **FDOT Design Manual**

The 2025 FDOT Design Manual (FDM) was effective on January 1, 2025 and includes all changes implemented via Roadway Design Bulletins issued between December 2023 and November 2024. The 2025 FDM includes revisions to speed management strategies based on design speed, revisions to sidewalk and crosswalk designs that improve pedestrian safety, revisions to bicycle facility designs that improve bicyclist safety, and revised lighting requirements including new criteria to address lighting for ramp crosswalks and channelized right turn crosswalks.



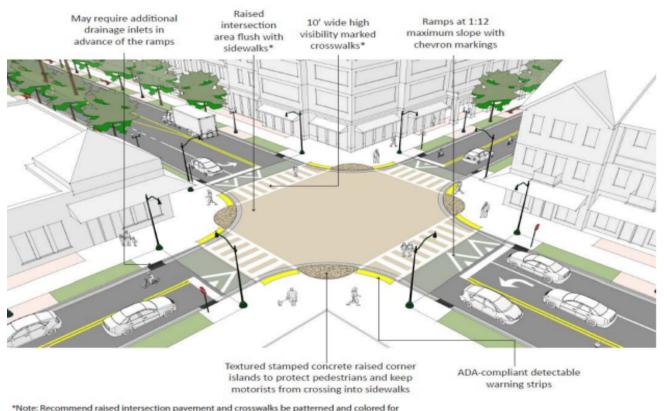
#### Raised Intersections

In 2023, FDOT began preparation of criteria for raised intersections. While raised intersections have been permitted in the FDM since its release in 2018, they have recently been recognized as an alternative to the raised crosswalk, which is used at the midblock condition. A new raised intersection conceptual drawing and accompanying design guidance are now shown in the 2025 FDM (Figure 5). This provides engineers and designers with the basic elements of an effective and safe, context-appropriate raised intersection.

Topic #625-000-002 FDOT Design Manual

January 1, 2025

Figure 202.3.4 Concept Sketch - Raised Intersection



increased visibility. Pattern and color should be coordinated with Department and local agencies.

Figure 5: FDOT Design Manual Raised Intersection



#### Restricting Crossing U Turn Intersections

An RCUT is an alternative intersection design that directs all movements from a minor street to turn right. Motorists who want to turn left or go straight through the intersection are directed to use a dedicated U-turn downstream of the intersection (Figure 6). The RCUT provides the major street with full access to the minor street, often including left-turn pockets. Medians provide pedestrians with safe refuge to cross. RCUTs can be signalized or controlled by stop signs depending on the location and traffic volumes. The ideal location for an RCUT is a median-divided highway where major street volumes are high and minor street volumes are low.

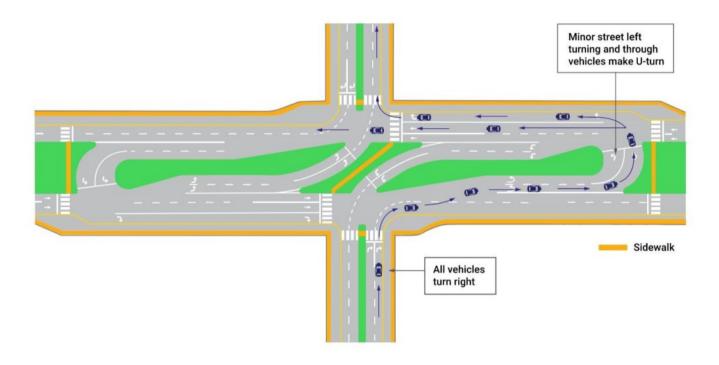


Figure 6: Restricting U Turn Intersections



# **MOVING TOWARDS ZERO**

## **Target Zero Campaign**

Target Zero is Florida's statewide initiative to reduce traffic fatalities and serious injuries with an ultimate goal of zero. On average, nine people are killed and 49 are seriously injured on Florida's roads every day. In the majority of those serious and fatal crashes, driver behavior is a contributing factor. This initiative focuses on connecting, interacting, and designing our transportation system to specifically relate to those road users that are most involved in crashes that resulted in serious injuries and fatalities.

Previous safety campaigns in Florida have focused on educating the public about laws and rules, however they have been unsuccessful in changing behaviors. Conducting focus groups with drivers around the state revealed the traffic safety challenges in Florida are actually due to larger overarching societal challenges which lead to dangerous behaviors behind the wheel.

Florida is employing a human-factors approach to address these life challenges and behaviors to prevent crashes before they occur. This supports the 'Safe Road Users' component of our Safe System Approach to implementing Florida's SHSP. Utilizing human-factors research and the results of data analysis, and a variety of media, marketing efforts are focusing on specifically tailored messages that resonate with target audiences. Some examples of the tailored media messages can be found in Figure 7.

FDOT will continue to align and commit HSIP, NHTSA, and other available resources to the Target Zero Campaign, building an immediately recognizable brand



Figure 7: Target Zero Messages

in Florida that will eventually become the umbrella for all of Florida's traffic safety messaging, like Click It or Ticket and Drive Sober or Get Pulled Over. More information about Target Zero can be found on the <u>Target Zero</u> website.



# **Improving Partner Coordination and Aligning Safety Activities**

## Collaboration with Florida's MPOs to Prioritize Safety Targets

FDOT continues to collaborate with Florida's 27 MPOs on setting and monitoring safety performance targets. To build on this target setting, FDOT continues to encourage Florida's MPOs to give greater attention to actionable steps toward improving safety withing their planning, project identification, and project prioritization processes. FDOT continues to provide technical assistance to MPOs in their federally required safety performance setting process. FDOT has worked closely with the Florida Metropolitan Planning Organization Advisory Council (MPOAC) and all of Florida's MPOs to share important planning, target setting, and performance monitoring resources, such as the Signal Four Analytics Traffic Safety Dashboard.

FDOT engages MPOs at Florida Metropolitan Planning Partnership (FMPP) meetings on a quarterly basis and uses these meetings as important working sessions to address traffic safety at the regional and local levels. FMPP meetings create excellent opportunities to align statewide, regional, and local safety priorities while providing updates and gathering valuable feedback on HSIP implementation.

As part of the development of the <u>Vulnerable Road User Safety Assessment</u>, FDOT consulted with District and MPO level staff. Through this consultation, eight virtual meetings with 150 attendees were conducted. Additionally, District and MPO staff were consulted to gather feedback, identify ongoing actions being taken on high-priority segments, and potential strategies and countermeasures to address safety risks at the identified priority VRU locations. To support the updated VRU Safety Assessment, FDOT will again engage MPO partners at an upcoming FMPP meeting to collect insights on top priority VRU locations and understand community needs, ongoing projects, and potential systemic solutions that could eliminate non-motorized fatal and serious injury crashes, not only at the top priority locations but at similar locations around the state.

## Local Road Safety Plans

A local road safety plan (LRSP) is a valuable tool providing a framework for identifying, analyzing, and prioritizing roadway safety improvements, specifically on local roads. The LRSP development process and content are tailored to local issues and needs and result in a list of challenges, risks, actions, and solutions aligned with the needs of a specific community or local roadway.

Because almost half of traffic fatalities and serious injuries occur on local roadways, LRSPs are critical in helping Florida achieve Target Zero. FDOT understands the importance of LRSPs and provides technical assistance to local governments to support their development. From 2020 through 2022, FDOT identified six rural counties in Florida and collaborated with them to develop County Road Safety Plans with a focus on addressing fatal and serious injury crashes in high-crash locations and in locations that present a high crash risk. Safety improvements that are low-cost and high-benefit were identified to maximize the reduction of fatal and serious injury crashes on local roadways.

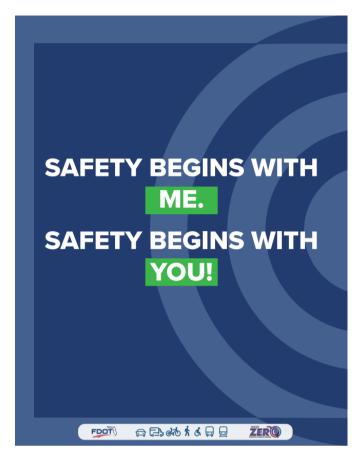
FDOT is expanding the program of LRSPs to include counties in Florida with significant opportunities to improve traffic safety. Local representatives will manage their respective safety plans in coordination with FDOT District representatives.



#### Central Florida Strategic Safety Plan

The <u>Central Florida Strategic Safety Plan</u> provides a bold framework on how state and local communities will work together across Central Florida to address safety challenges. The plan focuses on the following actions in prioritizing Target Zero:

- Safer street designs
- Changing behavior
- Collaborates with internal and external partners
- Leverages local Vision Zero partners
- Develops action plan with short term, midterm, and long term goals.



### Florida Rail Safety Coalition

The Florida Rail Safety Coalition is FDOT's ongoing effort to help engage and collaborate with technical stakeholders, subject matter experts, public road agencies, railroads, the Federal Railroad Administration, law enforcement, universities, and communities. The coalition embodies Florida's rail safety vision to be a national leader in rail safety by eliminating fatalities and injuries involving Florida's railroads.

#### Safe Streets and Roads for All

The Safe Streets and Roads for All (SS4A) is a federal program providing grant funding to local, regional, and tribal communities for initiatives to prevent roadway fatalities and serious injuries. Since 2022, 123 transportation agencies were awarded SS4A Grants in Florida.

Many grant awardees have chosen to develop Vision Zero Action plans that use a data-driven process to identify traffic safety challenges in their communities and prioritize a list of production-ready projects to address those safety challenges.



# **Target Zero Partners**

Figure 8 shows a map including Florida's Target Zero partners. The communities and regions identified on this map are those with safety action plans, local road safety plans, and traffic safety visions focused on eliminating fatalities and serious injuries.

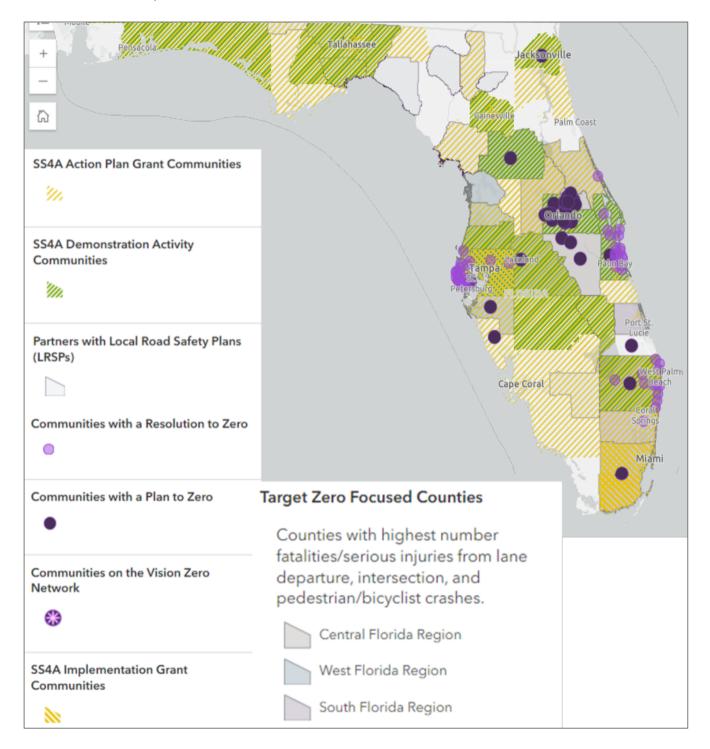


Figure 8: Target Zero Partners - Dashboard



# CONCLUSION

While Florida's number and rate of fatalities remain high, the state is leveraging all HSIP resources to strategically identify, prioritize, and implement projects and programs intended to eliminate fatalities and serious injuries. Florida has invested in a variety of analysis tools and approaches to allow FDOT Districts to better understand the most pressing safety challenges in their regions and prioritize the right solutions for inclusion in the HSIP.

Florida remains committed to eliminating fatalities and serious injuries and while the HSIP is not the only program focused on achieving this goal, it is a primary driver in Florida's safety investment. Florida will continue to refine safety data analysis, cost-benefit analysis, and project prioritization with the goal of achieving our vision of zero. This is how we save lives.

